There are six issue areas under the topic of Socioeconomics. Many comments included issues that may appear in more than one issue area.

BENEFIT AND COST IMPACTS (INCLUDES FINANCIAL IMPACTS)

933 comments. Most comments identified financial impacts to various entities. A comment criticized the DEIS for proposing to spend tens of millions of dollars to control bison after having spent tax receipts throughout the 20th century to revive the bison population. Impacts to the livestock industry included threats of boycotting by other states, costs of vaccination programs, and costs in altering grazing practices. The costs of quarantine and vaccination of bison was considered unacceptable by some and an enormous waste of tax money. Comments indicated the DEIS did not adequately address impacts to the non-market value of "increased bison viewing opportunities" which the DEIS states would increase tourism expenditure by \$20 million per year. Hunting was identified as an \$11 million industry that might be increased if bison hunts were allowed.

Several comments posed some alternative approaches of cost-benefit analysis. Many comments said cost-benefit analyses were seriously lacking: Comments wanted to see cost-benefit analyses on the gateway communities; on land use of the status quo versus SMAs versus ranch lands converted to residential developments. Others requested cost-benefit analyses of the proposed changes to Forest Service grazing leases. Similarly, several comments indicated the analyses should present how many people would be affected by each alternative (gateway communities, residents within the GYA). Many comments questioned the value of having only qualitative impact evaluations on certain of the economic elements. Others said the economic analysis was wrongly focused on two counties in Montana when it should have include all gateway communities and the county they were in (by extrapolation, this would include Freemont County, Idaho). Finally, many comments said the EIS should present cost-effectiveness analyses of the cost of the alternative versus its achieving the purpose and need of the management plan.

Comments called for the DEIS to compare the cost of purchasing the cattle in the conflict zone versus the cost of implementing any of the alternatives in the DEIS; to increase entrance fees to pay for certain elements of the bison management plan (such as bison transportation) or to preserve and improve the park in general; to compare the cost to vaccinate the cattle in the conflict zone versus implementing any of the alternatives in the DEIS; and to implement plans that will protect both tourism and the cattle industry.

Most comments acknowledged the significance of tourism, the recreation industry, and ecotourism wildlife viewing, and some comments suggested that impacts to the tourism industry now (snowmobile touring) would be more than offset by an improved bison herd providing long-term benefits to the tourism industry. Other comments suggested that no dollar amount can be placed on a thriving population of wildlife, and that the value of a disease-free herd of bison in Yellowstone also should be evaluated.

"The EIS does not recognize the ecotourism value of wildlife versus cattle in the Yellowstone area and is sacrificing all these buffalo to avoid contact with only 2,000 cattle. More cost-effective options should be offered, such as alternate grazing areas." - Individual, Edina, MN, YELL-10127.

Comment 2

"The DEIS makes references to the need for Montana to maintain a 'class-free' classification, and suggests the failure to do so would have 'extensive economic ramification.' Yet there is no detailed information provided regarding these so-called ramifications, i.e. associated costs of screening Montana cattle for the disease, an economic analysis of other cattle-producing states which are presently not 'brucellosis-free' (if, indeed, even are any), why cattle operations outside the Yellowstone area would be affected when there is clearly no risk for brucellosis transmission outside the immediate Yellowstone area, etc. The suggestion that the few bison who inadvertently wander across the park boundary into Montana somehow pose a threat to the entire state cattle industry is utterly preposterous." - Individual, Lincoln, RI, YELL-10283.

Comment 3

"With some alternatives there is even an increased risk. If that is the case, Washington state's animal health program will have no option but to restrict the movement of Montana cattle into our state. The State Veterinarian has that authority in rule to require Brucellosis testing from any Brucellosis free state if there is the risk of Brucellosis to the cattle population of Washington State." - Public Agency, State of Washington Dept. of Agriculture, YELL-10399.

Comment 4

"As a final comment, I would wonder what the cost trade off would be to just buy the cattle that may be exposed to the bison each year compared to the cost of some of the alternatives that are offered in this EIS." - Individual, Lexington Park, MD, YELL-10482.

Comment 5

"We ask that the EIS consider the impacts and costs of separating cattle from wildlife on bison and elk winter range, and assess realistically the actual, rather versus the perceived threat of brucellosis transmission. This would save taxpayers money, ensure that Montana's cattle industry maintains its 'brucellosis free' status, and would protect the wild bison herd..." - Individual, Republic, WA, YELL-10524.

"Plan 'B' advocates providing added assurance to states importing Montana cattle by testing all cattle in the conflict zone before they leave the area to endure they are brucellosis-free. This testing program is cost-effective because the number of cattle is small and cattle are routinely rounded up for other purposes. APHIS should pay for this testing as they do in Wyoming." - Individual, Corvallis, MT, YELL-10692.

Comment 7

We think the state of Montana would be more concerned about the impact of negative publicity over this matter to their overall economy, especially since the greater part of it is based on 'recreation, tourism, and service industries' according to the EIS, and most of that centered on Yellowstone." - Individual, East Haddam, CT, YELL-10811.

Comment 8

"The annual operating costs of Alternative 2 (summary page 73) are roughly 25% of the operating costs quoted in the preferred alternative (summary page 111). Both options arrive at the same result which is to reduce the risk (for this planning period) of transmission of brucellosis to cattle. Why did the Cooperators choose the preferred alternative number 7 which has an annual operating budget of over \$2.2 million and not Alternative 2 which has an annual operating budget of roughly \$580,000? It appears that the burden of implementing the change is being placed upon the bison and the Tribes and the tourists that enjoy seeing bison and now the taxpayer while the few people adjacent to the park - that graze livestock - are being protected and not asked to make any sacrifices. The taxpayer is asked to pay a higher price than needed to protect the cattle industry in Montana. From an economic standpoint this is not justifiable and it is also clear it is not a reasonable decision." - Tribe, Nez Perce Tribe, YELL-11409a.

Comment 9

"I believe none of your alternatives passes the common sense test...an unrealistically high number...trapping costs would be approximately \$850/bison. And all of this to protect 2,000 cows whose owners pay the forest service a total of \$5,000 per year to graze on public lands." - Individual, Yellowstone National Park, Wyoming, YELL-1156.

Comment 10

"I do not want to disregard the economic impact to the ranching families around Yellowstone, however, I would like to see figures on how many families and ranch workers (and not just number of cow-calf pairs) the alternatives affect, and how many of these families depend solely on cattle as their principle income. Also, the DEIS asserts that exposing these few cattle in the Yellowstone area jeopardizes Montana's entire cattle industry, without presenting any evidence to this effect. Please enlighten me." - Individual, Missoula, MT, YELL-6391.

"Yellowstone is not beholden to the economic interests of the gateway communities nor is it responsible for the excessive and irresponsible development of the communities based on the faulty presumption that snowmobiles would always enjoy access to YNP. Whatever economic impact the gateway communities may experience from YNP being closed to snowmobiles could be mitigated if the communities promote non-motorized recreation in Yellowstone. Furthermore, closing YNP to snowmobiles will not eliminate snowmobile recreation in the area, because hundreds of miles of groomed trails exist on U.S. Forest Service (USFS) lands adjacent to YNP. Though it is anticipated that the regional economic impacts of a YNP closure to snowmobiles would be minimal whatever economic impact is felt by the gateway communities would be less than the adverse economic impacts of snowmobiling on YNP wildlife, air quality, solitude and serenity, and visitor experience." - Organization, Florida Biodiversity Project, YELL-9382.

Comment 12

"Finally, the 'Environmental Consequences' chapter should include a more detailed estimate of how the changes in visitation might affect various communities economically under various alternatives. There are some estimates of impacts to the west Yellowstone economy associated with closing roads in winter. There are also estimates of the increases in nonmarket values associated with expanded bison range. However, there should be an analysis of how the various alternatives could affect the recreation economies of other communities and other states. Certainly, implementation of either alternative 5 or 6, or any test-and-slaughter program, will cause tourism economies outside Park and Gallatin counties to decline, including recreation-dependent economies in Wyoming and Idaho, and these impacts should be discussed. Alternatively, implementation of a plan that maintains or improves bison viewing opportunities would have positive economic impacts. Wolf recovery, for example, was estimated to lead to about a 5 percent increase in visitation for non-resident visitors, leading to about \$20 million annual increase in tourism spending." - Organization, Greater Yellowstone Coalition, YELL-15420.

COST TO LIVESTOCK OPERATORS

785 total comments. Most comments supported the Citizen's Plan alternative, the Plan B alternative, and the Bison Alternative as better means to reduce costs to livestock operators than implementing any of the alternatives in the DEIS. 55 comments supported compensation to local ranchers for altering or eliminating their grazing allotments or vaccinating their cattle, or for forage lost to bison, and compensating all landowners for property damage caused by bison. A fund similar to the one to compensate depradation by wolves was suggested. 29 comments opposed such compensation. One comment stated that higher grazing fees might be warranted in this area to, perhaps, somewhat reduce the cattle-bison conflicts. Comments stated that management should be for risk reduction or acceptable risk. Comments from cattlemen and businessmen indicated that no risk is acceptable. Other comments said the DEIS needs to provide details on grazing leases (number, kind, length, total cost to rancher, etc.) to allow better cost evaluation to operators.

Some public "solutions" were also suggested, such as an "Adopt-a-Bison" program for citizens to contribute to a fund for management.

Comment 1

"Why wasn't a table or summary included to describe/exhibit a cost comparison between what it would cost to vaccinate the cattle versus what it would cost to vaccinate bison?" - Individual, Harrisville, RI, YELL-1006.

Comment 2

"Hunting might be an interesting solution if a limited number of permits were issued each year and if the proceeds of those permits could go to compensate ranchers for any losses they incur... Ranchers should not be compensated for the inconvenience of bison on public lands through the purchase of their grazing allotments... Equity seems to demand that ranchers share some public burdens when they receive public benefits such as grazing subsidies." - Individual, Longmont, CO, YELL-10279.

Comment 3

"Public money is to be used for the preservation of wildlife, not its destruction, and no public help whatsoever should be given to this cattlemen's war on the buffalo." - Individual, Galloway, OH, YELL-10280.

Comment 4

"YES, establish federal subsidies (paid by APHIS) to vaccinate all livestock who graze on the same land as bison." - Tribe, Minnesota Chippewa Tribe, YELL-10349.

Comment 5

"A number of the actions proposed in the alternatives could destroy the economic viability of the ranches in the impact area. When this occurs the most efficient way for a landowner to regain economic stability is to sell the private lands to the highest bidder, which will be private citizens or developers, not the federal government. The DEIS implies that the private lands would be available for purchase or control by agencies of the federal government. There is no assurance that monies could or would be appropriated for purchase of these lands or that the landowners would sell to governmental agencies when the lands are worth much more in the private sector. Private sale and subdivision of the lands would significantly reduce open spaces that are available to wildlife, increase wildlife-human and wildlife-domestic animal interaction, and increase the number of conflicts in the impact area. The DEIS must assess the impact of the sale of private lands, in the impact area of the DEIS, for private development." - Public Agency, State of Idaho Governor, YELL-11121.

"...addressing the socioeconomic analysis, how were the methodology and assumptions arrived at? Two, there is a lack of data specific to bison. And three, the economic ramifications to the livestock industry of Montana, Wyoming, and Idaho on a statewide basis is not analyzed. And four, it does not analyze the value of a disease-free bison herd under Alternatives 5 and 6." - Individual, Glen, MT, YELL-14878.

MINORITY AND LOW INCOME POPULATION EFFECTS

30 comments. The EIS identifies the low income and minority populations in the greater Yellowstone area, but comments indicated the DEIS failed to recognize and attempt to calculate the intrinsic value of bison to Native Americans. The analysis of bison given to tribal communities was based on auction value, but many comments indicated that the cultural and religious value was not calculated. The value of live bison provided to tribes was only compared on an annual basis but not analyzed over the more than 30 years that bison cows can give birth. It was stated that live bison provided to tribal communities would provide jobs as the tribes start or enhance their herds. The DEIS appears to focus exclusively on tribal communities in the discussions of minority and low income populations. There are, however, several small, rural communities throughout the GYA that might qualify as low income areas, except the DEIS provides no information except for some gateway communities and only two Montana counties. See related comments in Cultural Resources and Social Values.

Comment 1

"The alternatives do not attempt to evaluate the cost of the lost opportunity of the Tribes to receive carcasses and especially do not evaluate the cost to the Tribes of receiving live animals and the herds, and jobs and social ramifications within tribes that would be generated on reservations receiving live bison from Yellowstone, or the public assistance that might not be needed if Native American were able to obtain bison and start herds of their own. The inability to receive live animals is never measured in terms of cultural impacts." - Tribe, Nez Perce Tribe, YELL-10409a.

Comment 2

"The DEIS needs to address Environmental Justice as it relates to Native American Tribes and as described in guidance from the Council on Environmental Quality (CEQ)... The definition of disproportionately high and adverse environmental effects in the aforementioned CEQ guidance includes, 'Such effects as ecological, cultural, human health, economics or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment. EPA believe that the culling of Yellowstone bison with the use of lethal force is an interrelated impact as cited above and falls under the definition of significant impact, CEQ regulations 5 1508.27(b)(3)." - Public Agency, Environmental Protection Agency, YELL-14356.

"The other thing that they said at the time of the slaughter is those people that are low-moderate income people would have the first choice, when actually the contracts for the slaughtered animals that the Tribes did not slaughter actually went out of state." - Tribe, Fort Belknap Tribe, YELL-17734.

NON-MARKET VALUES

309 comments. Comments under this topic identified a wide range of items on which Americans place value. Comments asked the agencies to compare several options that could have financial effects on the National Park Service, on ranchers, on tourists, and on the states.

Comment 1

"States should have the opportunity of using the stray bison in their own preserves for a tourist draw." - Individual, Ennis, MT, YELL-10008.

Comment 2

"As the Draft EIS notes, "...the benefit of a land purchase to benefit elk far outweighed actual land acquisition costs." This 'non-market' or 'existence' value applies to bison as well." - Individual, Shaker Heights, OH, YELL-10338.

Comment 3

"It is a matter of deciding which is more valuable; a human-defined border and system of regulations, or the natural processes and functions of one of the last remaining bison populations." - Individual, no location, YELL-11414.

Comment 4

"Another important reason to increase the bison population is to increase the potential sightings of bison by tourists. The economic impact of tourists is important to the region as a whole, and the overall economic benefit probably more than offsets any losses due to reduced grazing on federal lands. This also shifts the economic benefits to many residents throughout the region instead of those few blessed with grazing leases."- Business, Attorney, YELL-11486.

Comment 5

"...alternative #2 makes the most sense to me. ...natural forces to determine the size of the herd resulting in a moderate increase in population; there is no capture, slaughter, quarantine, or hunt; it encourages vaccination of cattle; eliminates winter grooming and snowmobile use; has a low

annual cost; a beneficial impact from tourism - possible gain of up to \$20 million offsets potential loss of up to \$2 million from snowmobiling in West Yellowstone; and a positive impact on moral and humanitarian attitudes. I urge you to consider sensible and humane alternatives to protect our bison." - Individual, Louisville, KY, YELL-13258.

Comment 6

"The value of a disease free YNP bison herd is not addressed in the DEIS. Many pages are devoted to discussion of the non-market benefit of the YNP bison herd. However, if the bison could be provided to Native American Tribes to establish bison herds, excess bison could be sold to help defray the cost of maintaining a disease free herd, or disease free bison could be allowed to move outside the park." - Organization, U.S. Animal Health Association, YELL-9364.

Comment 7

"Nonmarket Values. This entire discussion is very suspect. It is based on an extremely controversial and largely discredited methodology that involves significant assumptions, based on significant assumptions, based on still other assumptions. In this case, many of the numbers are based on extrapolations to bison from endangered species, which bison are not, and which therefore involves highly suspect assumptions to begin with. No original research relative to bison themselves are involved. No discussion of the difference between nonmarket values of diseased animals versus healthy animals is undertaken. No discussion of the nonmarket values relative to snowmobiling or a healthy agricultural economy is undertaken (many people prefer 'Cows vs. Condos' for example). The statement is made that: 'There have been no estimates reported in the economic literature of the affect of the presence or abundance of bison or the value park visitors derive from Yellowstone National Park.' This should be enough by itself to preclude the inclusion of this entire discussion from the Final EIS. That no analysis of the significance of nonresponses to the statistical 'validity' of the samples is even attempted is another reason sufficient to preclude this discussion. No Alternative and no serious commenter that I am aware of has advocated for the elimination of bison from YNP, such that the question is not a viewing versus not viewing, or an intrinsic value of knowing bison are in YNP versus knowing they are not; but no analysis of variable population numbers, which is the real issue, is undertaken or even attempted. At any rate, this entire discussion should be deleted from the Final EIS." - Congressional, Montana State Senator, YELL-15316.

Comment 8

"On page xxii, the potential nonmarket values for alternatives 2, 3, and 7, which supports acquisition of additional grazing land for YNP bison, are estimated at \$1.6 million to \$22.9 million. The uncertainty and extremely wide range renders these values meaningless. Many economists view the evaluation of non-market outputs as "black magic that produces nothing but confusion" (Dyer, 1984). The use of relative terms rather than cardinal dollars would best be used in this type of nonmarket evaluation (Howitt, 1984). The DEIS does not adequately address the impacts of the alternatives on small ranching units with grazing permits on U.S. Forest Service

to the Park. For example, how would implementation of Special Management Areas affect livestock turnout dates (alternative feed sources, impact on livestock management practices, etc.)? Would above-normal management be required? What would be the effect of converting from a cow-calf operation to a steer/spayed heifer operation (Alternatives 2 and 3) – would the regional market supply-and-demand support this economically? If a federal grazing permittee were pressured to vaccinate an allotment, what are the alternatives? Any changes to a seasonal grazing permit or system will affect the entire operation..." - Public Agency, Idaho Governor's Office, YELL-14305.

REASONABLENESS OF PROJECT COSTS

2,216 total comments; 15 comments supported project costs as reasonable, but, 2,090 comments opposed the reasonableness of project costs. Most comments stated they hated to see their taxes spent on killing bison, especially when these great costs would be expended without documented cases of brucellosis transmission from bison to cattle in the GYA. Others said that spending tax monies for animal research was still a form of animal brutality. Some comments stated that the lowest cost alternative should be selected in any case, and many supported Alternative 2. Comments also urged that grazing fees be substantially increased to help pay for the selected alternative. Others said that the millions of dollars proposed for a management plan could better be spent on other resource protection programs in the park. Comments stated that a vaccination program for cattle was more cost effective than capture, testing, and quarantine of bison. Finally, many comments supported the implementation of the Citizen's Plan alternative, the Bison alternative, and the Plan B alternative as more cost effective that alternatives in the DEIS. Finally, some comments said that Chapter 2 should also include the costs of implementation by the State of Montana. See related comments in Benefits and Cost Impacts.

Comment 1

"The Preferred Alternative would cost taxpayers more than a million dollars per year to keep buffalo off public land that ranchers lease for less than \$5,000 annually. This is not in the public interest." - Individual, Casper, WY, YELL-10029.

Comment 2

"Given that total eradication of brucellosis in Yellowstone is impossible, the price to the public of chasing this pipe dream is too high. The agencies must manage for risk reduction at the more appropriate expenditure of my tax dollars." - Individual, Albuquerque, NM, YELL-10150a.

Comment 3

"It would also create corrals and a quarantine facility in an area that serves as a prime corridor for bison, elk, bighorn sheep, and antelope. All this for a cost of \$1.7 million a year in order to prevent a minimal risk to fewer than 1,800 cattle adjacent to the park from acquiring brucellosis is unacceptable to me." - Individual, Brunswick, ME, YELL-10303.

"The proposed action will incur huge monetary costs and will also have negative impacts on other wildlife in the Greater Yellowstone Ecosystem such as ungulates, grizzly bears, wolves, and other threatened or endangered species. KRCG fells public-land ranchers are already privileged to taxpayer-subsidized grazing on public land around Yellowstone. Now those ranchers are expecting that taxpayers will pay millions of dollars more to control bison." - Individual, Republic, WA, YELL-10524.

Comment 5

"I would argue that the funding that would be spent on such 'management programs' would be better spent funding research for an effective vaccination and treatment program and either eliminating the grazing leases or letting ranchers graze at their own risk." - Organization, Sierra Club, Santa Lucia Chapter, YELL-5432.

Comment 6

"Alternative 2 of the EIS draft estimates a 'beneficial impact' between 1.6 to 22.9 million dollars. Alternative 7 estimates an 'adverse impact' of 1.6 to 2.9 million dollars long term. This is a 25.8 million dollar difference if the two plans' estimates are correct. Why should the American taxpayer spend 25.8 million dollars to aid a few ranchers using our public land, while the ranchers themselves pay so little compensation to the government for grazing their cattle?" - Individual, Bethel, VT, YELL-8037.

Comment 7

"...the purchase and exchange of land with the Church Universal and Triumphant. Under that purchase, which has already been approved by Congress, the money for it has been [appropriated] there is a willing seller there. Under that reconfiguration of land ownership there, it is entirely possible the buffalo will be able to go to the places that they need near the Yellowstone River without coming into contact with cattle, therefore, there won't be the need for these expensive controversial options that the government is proposing to lock in here [and] now for many years to come." - Organization, Greater Yellowstone Coalition, YELL-15239.

SOCIAL VALUES

15,039 comments. Approximately half of all comments used terms such as "natural heritage", "national treasure," "national heritage," "of American history," "national symbols," "national icons," "religious symbol," "symbol of freedom," "natural resource," "Western heritage," or "cultural resource." All comments identified the bison as having value to the park, to the individual commentor, and to the succeeding generations. A few comments tied this intrinsic value to the value of the tourism dollar, but all comments indicated the value of bison was of

enough value to preserve or maintain for its own sake. Comments said the DEIS failed to describe the public attitudes and strong negative response to what happened in the winter of 1996-1997. Related comments can be found in Cultural Resources and Non-Market Values.

Comment 1

"Bison have an almost mythical symbolism in the folklore of the American west, and the millions of tourists who travel to the park each year do so, in part, to see these animals in their natural state." - Individual, Bothwill, WA, YELL-10450.

Comment 2

"In the minds of many people, the bison of Yellowstone National Park are as much a symbol of our national identity as the bald eagle." - Organization, Doris Day Animal League - YELL-10347.

Comment 3

"We want wild, free-roaming bison in the Yellowstone area. They are living national treasures and icons that can't speak up in their own defense." - Individual, St. Paul, MN, YELL-10086a.

Comment 4

"Having recently completed a tour of your beautiful country, I was saddened to see how few of your animals are left and even more horrified to hear about the plight of the bison which I feel is completely unnecessary because these magnificent beasts are part of your heritage and culture." - Individual, Harare, Zimbabwe, YELL-10261.

Comment 5

"By selecting the Preferred Alternative, the NPS and Agencies indicate their willingness to sacrifice bison to satisfy economic interests, rather than conserving the bison and leaving them unimpaired for the enjoyment of future generations, even in the absence of evidence that bison are the transmitters to cattle of the Brucella antibodies." - Individual, Lake Oswego, OR, YELL-10377.

Comment 6

"...but, if the NPS moves to approve and implement one of the current EIS alternatives, then I will have to consider whether I ever want to visit Yellowstone Park and Montana." - Individual, Fairfax, VA, YELL-4191.

"MANAGEMENT ACTIVITIES THREATEN THE PARK: Visitors experience at YNP will be negatively impacted by such visual eyesores as marked animals and holding pens. The sense of wilderness will be LOST! KEEP YELLOWSTONE WILD! ETHICS, ECONOMICS, ECOLOGY, and AESTHETICS DEMAND IT!" - Individual, Grand Canyon, AZ, YELL-2443.